REMARKS

Claims 1-8 are all the claims pending in the application. Claims 1-8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over by Tak-Shing P Yum, IEEE Transactions on Communications, Vol. 39, No. 8, August 1, 1991 (hereinafter "Yum") in view of US 5,940,738 to Rao (hereinafter "Rao").

The initial burden of establishing that a claimed invention is *prima facie* obvious rests on the USPTO. *In re Rikckaert*, 9 F.3d 1531, 1532 (Fed. Cir. 1993). To make its *prima facie* case of obviousness, the USPTO must satisfy three requirements:

1) The prior art relied upon, coupled with the knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated an artisan to modify a reference or to combine references. *In re Thrif*, 298 F.3d 1357, 1363 (Fed. Cir. 2002).

2) The proposed modification of the prior art must have had a reasonable expectation of success, and that determined from the vantage point of the artisan at the time the invention was made. *Amgen, Inc. v. Chugai Pharm. Co.*, 927 F.2d 1200, 1209 (Fed. Cir. 1991).

3) The prior art reference or combination of references must teach or suggest all the limitations of the claims. *In re Vaeck*, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991); *In re Wilson*, 424 F.2d 1382, 1385 (CCPA 1970).

The motivation, suggestion or teaching may come explicitly from statements in the prior art, the knowledge of one of ordinary skill in the art, or, the nature of a problem to be solved. *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999). Alternatively, the motivation may be implicit from the prior art as a whole, rather than expressly stated. *Id.* Regardless if the USPTO relies on an express or an implicit showing of motivation, the USPTO is obligated to provide particular findings related to its conclusion, and those findings must be clear and particular. *Id.* A broad conclusionary statement, standing alone without support, is not "evidence." *Id.; see also, In re Zurko*, 258 F.3d 1379, 1386 (Fed. Cir. 2001).

In addition, a rejection cannot be predicated on the mere identification of individual components of claimed limitations, emphasis added. *In re Kotzab*, 217 F.3d 1365, 1371 (Fed. Cir. 2000). ***Rather, particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed***, emphasis added. *Id.*

The Examiner asserts that Yum's switch is inherent to channel selecting means as set forth in claim 1 and Rao's request processor 1110, network adoption unit1108 and scheduler 1402 are equivalent to request receiving means, request handling means, request generating means and a request transferring means as set forth in claim 1. The Examiner, furthermore, asserts that there is motivation to incorporate Rao into a system of Yum to control individual channel requests to meet the subscribers demand and offer better services to the subscribers (pages 3-4 of the Office Action). Applicant respectfully disagrees with the Examiner. Applicant has carefully studied Yum's discussion of the local switches and Rao's discussion of digital

distributing system, which lack at least the request handling means and request generating means as set forth in claim 1.

To begin, Yum teaches a network system with local switches to handle customer requests. The local switches receive a customer request and check whether the program is currently being transmitted. If the program is available, a copy is transmitted to a customer. Otherwise, the local switch sends a request for a copy of the requested program to the central switch (see Fig. 1, pg. 1269, col. 1, ¶ 1). However, Yum does not teach the actual implementation of this network system. Specifically, in Yum, the local switch is a black box, which sends copies of the requested programs to customers. For instance, Yum does not teach or suggest the way the means are organized or how customers' requests are handled. In particular, Yum teaches a theoretical network without teaching the actual implementation of the network. Yum's local switch is a black box capable of performing some functions but how the local switch actually works is not disclosed in Yum.

To cure these deficient teachings of Yum, the Examiner recites Rao for its teachings of a network architecture which distributes digital data to the subscriber. Rao teaches server NVOD 1100 and OD-NVOD, which may have a storage 1102, opportunistic storage 1104 and external input 1112, which may include movies, commercial and other services (Figs. 11 and 14; col. 18, lines 38 to 53 and col. 22, lines 29 to 41). NVOD provides program to VPs as well as terminates unused channels. NVOD maintains a list of VPs to which it is coupled and when VP sends a cancellation, the NVOD server deletes the VP from the requester list and ceases the transmission of the channel (col. 21, lines 7 to 15). On the other hand, when a subscriber requests a program,

which is unavailable in VP, VP sends a request to the NVOD. This request is received by request processor 1110, which further checks the schedule 1106 (which has the schedule with timing for when the movies versus commercial should be transmitted) and transmits the requested program via network adaptation unit 1108 (Fig. 11; col. 19, lines 21 to 31).

However, Rao teaches an NVOD server which receives all programs and then selects which ones to pass to the user via multiplexing and network adoption unit. Thus, the Rao NVOD server is closer to a conventional broadcast unit than to the broadcast unit as set forth in claim 1.

For instance, Rao teaches a conventional request processing means 1406 or 1110, which forwards the user's request to the scheduler 1402 (see col. 19, lines 25 to 36 and col. 22, lines 53 to 55). Rao fails to teach or suggest a request handling means, which checks whether the requested channel is available, instead the scheduler just assigns a channel based on the user's request. In other words, Rao's NVOD server has all possible channel at its input; thus, there is no need to check if it available or not; the scheduler simply responds to the request by providing the requested program.

Even assuming *arguendo* that Rao's scheduler 1402, request processing 1406, multiplexer 1400 and network adaptation unit 1408 are similar to channel selection means, request handling means, channel broadcasting means and request receiving means, respectively, Rao still fails to teach an NVOD with the explicitly required request generating means and a request transmitting means as set forth in claim 1. The NVOD receives a request, which it processes by selecting the requested service. Since Rao's NVOD server always can respond to

the user's request without turning to another server, there is no need to generate and/or transmit a request anywhere else.

In other words, NVOD server receives all services; thus, it does not need to request for a particular service or channel. In short, Rao teaches providing services on demand but does not teach or suggest not having all of the available programs/channels at the input of the NVOD server. Thus, Rao is directed to using channels only on demand but it is similar to a conventional broadcasting unit because all possible programs serve as input into its NVOD server. In short, Rao does not teach the means for creating the theoretical network of Yum.

To sum up, Yum only teaches a theoretical network without teaching the actual implementation of the network. Yum's local switch is a black box capable of performing some functions (i.e. sending a copy of the channel if it is available at the switch or sending a signal requesting this channel from a central switch) but how the local switch actually works is not disclosed in Yum. For example, Yum does not teach or suggest any means for generating a request signal and sending this signal to the central switch or for that matter how the central switch will handle a request from the local switch.

Rao, on the other hand, teaches a distributing system, which has all channels at the input. As such, there is no need to check whether the requested channel is available, instead the scheduler just assigns a channel based on the user's request. Therefore, Rao does not provide means for the theoretical network of Yum. For example, Rao does not teach or suggest any means for generating and communicating a user request outside NVOD server or for checking

whether the channel is available at the input of the NVOD. In short, neither of the references, either alone or in combination, teach or suggest request handling means and request generating means as recited in claim 1. Thus, Applicant believes that the Examiner cannot fulfill the "all limitations" prong of a *prima facie* case of obviousness, as required by *In re Vaeck*.

Moreover, there is no motivation to combine the references in a manner suggested by the Examiner. A critical step in analyzing the patentability of claims pursuant to section 103(a) is casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field. *See In re Kotzab*, 55 USPQ2d 1313, 1316 (Fed. Cir. 2000) (*citing In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999)). ***Close adherence to this methodology is especially important in cases where the very ease with which the invention can be understood may prompt one " to fall victim to the insidious effect of a hindsight syndrome wherein that which only the invention taught is used against its teacher***." *Kotzab,* 55 USPQ2d at 1316 (*quoting W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 USPQ 303, 313 (Fed. Cir. 1983)). Although a reference need not expressly teach that the disclosure contained therein should be combined with another, the showing of combinability, in whatever form, must nevertheless be "clear and particular". *Winner International Royalty Corporation v. Ching-Rong Wang*, 202 F.3d 1340, 1348, 53 USPQ2d 1580, 1586-87 (Fed. Cir. 2000).

Yum teaches a local switch thereby reducing size of the central switch and Rao teaches a distributing system for dealing with the latency problem when the user switches between programs. In short, the two references deal with somewhat unrelated problem. The only

motivation for combining the two references is the teachings of the present invention. Thus, Applicant respectfully submits that the Examiner cannot fulfill the motivation prong of a *prima facie* case of obviousness.

Based on at least the foregoing reasons, Applicant respectfully submits that the combination of Yum and Rao fails to disclose all of the claimed elements as arranged in claim 1. Therefore, the combination of Yum and Rao clearly cannot render the present invention obvious as recited in claim 1. Thus, Applicant believes that claim 1 is allowable, and respectfully requests that the Examiner withdraw the § 103(a) rejection of claim 1. Claims 2-4 are patentable at least by virtue of their dependency on claim 1.

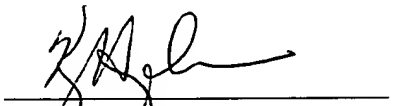
In addition, claim 5 recites a second broadcasting unit supplied with a limited selection of channels chosen from said plurality of channels from the first broadcasting unit and sending a second type of request to said first broadcasting unit. This recitation is somewhat similar to the recitation of request generating means and request handling means as set forth in claim 1. Since claim 5 contains features that are similar to the features argued above with respect to claim 1, those arguments are respectfully submitted to apply with equal force here. For at least substantially the same reasons, therefore, Applicant respectfully requests the Examiner to withdraw this rejection of independent claim 5 and its dependent claims 6-8.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly invited to contact the undersigned attorney at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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